# NHDOT SPR2 PROGRAM RESEARCH PROGRESS REPORT

| Project#<br>26962J                         |                    | Report Period Year: 2018                                |  |  |
|--|--------------------|---|--|--|
|  |                    | □Q1 (Jan-Mar) 図Q2 (Apr-Jun) □Q3 (Jul-Sep) □Q4 (Oct-Dec) |  |  |
| Project Title:                             |                    |   |  |  |
| UAS and Transportation Projects            |                    |   |  |  |
| Project Investigator: Jarlath O'Neil-Dunne |                    |   |  |  |
| Phone:802-656-3324                         |                    | E-mail: joneildu@uvm.edu                                |  |  |
| Research Start Date:                       | Research End Date: | Project schedule status:                                |  |  |
| December 1, 2016                           | September 30, 2019 | ☐ On schedule ☐ Ahead of schedule ☐ Behind schedule     |  |  |

#### **Brief Project Description:**

The overall objective of this project is to evaluate UAS technology for a broad range of case studies relating to the specific needs of the New Hampshire Department of Transportation NH DOT). Specifically, this project seeks to:

- 1. Determine the types of transportation projects for which UAS are best suited for.
- 2. Evaluate the capabilities and limitations, along with the costs and benefits, of using UAS technology for a variety of transportation projects.
- 3. Outline the policies, procedures, staffing, and information technology infrastructure required for NH DOT to fully implement UAS technology.
- 4. Develop NH DOT's UAS capabilities.

### Progress this Quarter (include meetings, installations, equipment purchases, significant progress, etc.):

- Draft fact sheets for each case study modified (Task 8)
- Draft final report modified (Task 8)

## Items needed from NHDOT (i.e., Concurrence, Sub-contract, Assignments, Samples, Testing, etc...):

• Feedback on latest versions of draft reports and fact sheets.

#### Anticipated research next 3 months:

Finalize reporting products (Task 8).

Circumstances affecting project: Describe any challenges encountered or anticipated that might affect the completion of the project within the time, scope, and budget, along with recommended solutions to those problems.

None.

| Tasks (from Work Plan)                             | Planned % Complete | Actual % Complete |
|--|--------------------|-------------------|
| Task 1: Establish a stakeholder advisory committee | 100%               | 100%              |
| Task 2: UAS Case Studies                           | 100%               | 100%              |
| Task 3: UAS Mission Planning Profiles              | 100%               | 100%              |
| Task 4: UAS Operations                             | 100%               | 100%              |
| Task 5: UAS Products                               | 100%               | 100%              |
| Task 6: Provide UAS Products to NH DOT             | 90%                | 95%               |
| Task 7: Implementation Assessment                  | 80%                | 100%              |
| Task 8: Reporting                                  | 50%                | 95%               |